Editorials
Antibiotic stewardship:
where next?

INTRODUCTION

Over the last few years the headlines and news of an antibiotic apocalypse have been displaced by war and pandemic. However, the global challenge of antibiotic overuse and antimicrobial resistance remain unchanged.

This issue of the *BJGP* includes two contrasting articles on the topic.[1,2] The first, a further exploration of the potential benefits (or not) of prescribing antibiotics for children presenting with lower respiratory tract infection.[1] Limited information existed to guide prescribing before the publication of the ARTIC PC (Antibiotics for lower respiratory tract infection in children presenting in primary care) randomised controlled trial (RCT).[3] RCTs are often criticised as not representing 'routine practice' because of restricted selection and intense follow up. In this article, participants enrolled to an observational study running alongside the randomised trial are included in a combined analysis, hence addressing some of those concerns and improving the generalisability of the findings. No substantial differences emerged from the data compared to the randomised analysis, emphasising the limited role of antibiotics in this group for reducing symptom burden.

In contrast, the second article describes an attempt at a real world intervention to reduce antibiotic use in higher prescribing practices.[2] The authors first created a central resource including three evidence-based interventions targeting prescribing behaviour (C-reactive protein testing, enhanced communication training, and delayed prescriptions). This was implemented prior to and up to the pandemic in a number of practices identified as being in the top 20% of antibiotic prescribers. Practices volunteered to participate but were not identified using established research networks and the intervention was delivered with a 'light touch' to mimic a scalable implementation. Practices were provided with resources and were able to choose which ones they wanted to use and how. Despite evidence that some practices changed their workflows to incorporate Antimicrobial Stewardship Strategies (AMS), the result as fully described in the article was a patchy and variable implementation with no measurable impact on overall prescribing data.

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ANTIBIOTIC EFFECTIVENESS

There is growing evidence for a variety of respiratory infections that antibiotics provide little or no symptomatic benefit and guidelines encourage a reduction in prescribing. In addition, randomised trials clearly show a reduction in prescribing is feasible using a variety of strategies.[4] However, implementation into routine care remains a challenge, and a simple high-level dissemination of materials, mirroring typical AMS communication with practices, and website support with a locally appointed antibiotic champion had little impact on prescribing even in volunteer practices.

While it is clear that antibiotics are unlikely to be helpful for the vast majority of those presenting with acute respiratory illness to primary care there is an opposing and powerful narrative. The rare but devastating risk of sepsis and now the risk of invasive streptococcal infection in children gain column inches and raise uncertainty in clinicians and anxiety levels in parents who may not be easily convinced that it is safe and sensible to withhold prescribing. Life is not easy in a time-pressured service.

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CURRENT POLICY

In the meantime, government initiatives are likely to shift the delivery of assessment and treatment away from traditional practice-based services. Current policy supports both the development of community pharmacy services through the NHS Community Pharmacist Consultation Service[5] and establishment of new regional respiratory assessment centres.[6] These may indeed offer opportunities, near-patient testing facilities in centralised locations may improve access to tests and prove to be more stable over time than in-practice settings.[7] However, changing the site of assessment, and introducing point-of-care tests more widely, may also influence consultation behaviour and result in more people with less severe symptoms accessing the service.

Implementation of point-of-care testing, a complex behaviour change intervention, should not be underestimated, especially when prescribers are working in novel contexts and delivering services as part of new multidisciplinary teams. It is reassuring that an evaluation of a sore throat near-patient testing service in Welsh pharmacies suggest that overall supply of penicillin was reduced in the areas with the service,[8] and national rollout has been successfully implemented.[9]

CONCLUSION

It remains to be seen how the policy initiatives are implemented and outcomes assessed. Will they be successful in alleviating pressure on traditional primary care without creating further staffing pressures or deskilling the remaining workforce? Will they also preserve patient safety? Certainly they represent

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opportunities to make greater use of rapid testing to better target antibiotic prescribing.

In the meantime, practitioners should not forget the need for good stewardship, to make use of available decision rules, to share decision making with patients, and to make appropriate safety net arrangements when using a delayed or no prescribing strategy.

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